

Patent claims

1. A smoke-permeable, moisture-resistant, tubular, biaxially oriented food casing, characterized in that it comprises a mixture of at least one aliphatic (co-)polyamide and at least one water-soluble synthetic polymer, and in that the water vapor transmission rate of the casing is 40 to 200 g/m²·d.
2. The food casing as claimed in claim 1, characterized in that the aliphatic (co-)polyamide is poly(ϵ -caprolactam), poly(hexamethylene adipamide), the copolyamide is of ϵ -caprolactam and ω -laurolactam (= nylon 6/12), nylon 6/66, a polyetheramide, polyesteramide, polyetheresteramide, polyamidourethane.
3. The food casing as claimed in claim 1 or 2, characterized in that the content of the aliphatic (co-)polyamide is 50 to 94% by weight, preferably 55 to 90% by weight, particularly preferably 60 to 85% by weight, in each case based on the total weight of the mixture.
4. The food casing as claimed in one or more of claims 1 to 3, characterized in that the water-soluble, synthetic, organic polymer is preferably a partial or completely saponified poly(vinyl alcohol), a copolymer having vinyl alcohol units, a poly(alkylene glycol), a copolymer having alkylene glycol units, a polyvinylpyrrolidone, a copolymer having vinylpyrrolidone units and units of at least one α,β -olefinically unsaturated monomer, a homopolymer of, or a copolymer having, units of N-vinylalkylamides and/or a (co-)polymer of or having units of α,β -unsaturated carboxylic acids or α,β -unsaturated carboxamides.
5. The food casing as claimed in one or more of claims 1 to 4, characterized in that the content of the at least one synthetic, water-

soluble polymer is 3 to 50% by weight, preferably 10 to 40% by weight, particularly preferably 15 to 30% by weight, based on the total weight of the thermoplastic mixture.

- 5 6. The food casing as claimed in one or more of claims 1 to 5, characterized in that the mixture comprises at least one additive which influences the optics, haptics, the moisture storage capacity or the peeling behavior.
- 10 7. The food casing as claimed in claim 6, characterized in that the at least one additive is a polysaccharide, an inorganic filler or a color pigment.
- 15 8. The food casing as claimed in claim 7, characterized in that the inorganic filler consists of quartz powder, titanium dioxide, calcium carbonate, talcum, mica or another aluminosilicate, consists of glass staple fibers, other mineral fibers or microglass beads.
- 20 9. The food casing as claimed in claim 6 or 7, characterized in that the content of the at least one additive is 0 to 25% by weight, preferably 1 to 20% by weight, particularly preferably 2 to 8% by weight, in each case based on the total weight of the mixture.
- 25 10. The food casing as claimed in claim 7, characterized in that the polysaccharide is starch, cellulose, an exo-polysaccharide or a polysaccharide derivative.
- 30 11. The food casing as claimed in one or more of claims 1 to 10, characterized in that the mixture comprises a plasticizing aid, preferably glycerol, mono- and diglycol, trimethylolpropane, a mono-, di- or triester of glycerol with carboxylic acids, formamide, acetamide, N,N-dimethylformamide or N,N-dimethylacetamide.

12. The food casing as claimed in one or more of claims 1 to 11, characterized in that it is tubular and seamless.
- 5 13. The food casing as claimed in claim 12, characterized in that it is bent into a ring shape.
- 10 14. A method for producing a food casing as claimed in one or more of claims 1 to 13, characterized in that a mixture which comprises at least one aliphatic (co-)polyamide and at least one water-soluble synthetic polymer is heat plasticized and extruded through a ring die to form a primary tube and in that the primary tube is cooled, then heated to a temperature required for stretching and then biaxially stretched to form the food casing.
- 15 15. The method as claimed in claim 14, characterized in that the casing after stretching is heat set.
- 20 16. The method as claimed in claim 14, characterized in that the tubular casing is then formed into a ring, so that it takes on a ring or spiral shape.
- 25 17. The use of the food casing as claimed in one or more claims 1 to 13 as artificial sausage casing, preferably as casing for smokeable scalded-emulsion sausage.